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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/866,853 | 05/30/2001 | Kazuo Tamura | KOJIM-401 | 7262 |

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EXAMINER

SHEEHAN, JOHN P

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1742

DATE MAILED: 07/05/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

HC5

| | | | |
|------------------------------|-------------------------------|-------------------------------|--|
| Office Action Summary | Application No. 09/866,853 | Applicant(s) TAMURA ET AL. | |
| | Examiner John P. Sheehan | Art Unit 1742 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101/112

2. Claim 5 provides for the use of the rare earth permanent magnet in high efficiency motors, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 5 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imaizumi et al. (Imaizumi, US Patent No. 4,902,357).

Imaizumi teaches a method of making a sintered rare earth-transition metal-boron permanent magnet having a composition that appears to overlap the alloy composition recited in the instant claims (column 1, lines 61 to 65 and each of the Examples). Imaizumi's method comprises crushing a rare earth-transition metal-boron alloy, compacting the alloy powder in a magnetic field, sintering the powder compact, machining the sintered compact and heat treating the machined compact in an atmosphere having an oxygen partial pressure of 10^{-8} to 1 Torr (column 2, lines 1 to 20, also see each of the Examples in this reference). The heat treatment in an atmosphere having an oxygen partial pressure of 10^{-8} to 1 Torr creates an oxide surface layer on the magnet which improves the corrosion resistance of the magnet (column 2, lines 40 to 45). Imaizumi teaches specific examples wherein the heat treatment in the oxygen containing atmosphere lasts 30 minutes (column 3, lines 10 and 59), which is encompassed by the instant claims.

Imaizumi and the claims differ in that Imaizumi does not teach the exact same alloy composition, the same heat treatment times and partial pressures and is silent with respect to the magnetic properties of the intermediate product.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Imaizumi's alloy composition and the heat treatment times and partial pressures overlap the claims, thereby establishing a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549 and MPEP 2144.05. Further, with respect to the magnetic properties of the intermediate product it is the Examiner's position that in view of the fact that Imaizumi's alloy composition overlap the alloy composition recited in the claims and is made by a process which is the same as recited in the instant claims one of ordinary skill in the art would expect that Imaizumi's intermediate would have the same properties as applicants' intermediate product.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP2112.01.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takebuchi et al. (Takebuchi, US Patent No. 5,595,608) in view of Imaizumi et al. (Imaizumi, US Patent No. 4,902,357)

Takebuchi teaches making sintered rare earth-transition metal-boron permanent magnets using a two alloy powder mixture (column 4, lines 9 to 14) wherein the composition of the alloy powders overlap the alloy powders recited in the instant claims (column 3, lines 8 to 30 and column 5, lines 14 to 33) and the powders are formed by pulverizing an alloy ingot using hydrogen decrepitation (column 5, line 63 to column 6, line 5).

Imaizumi teaches and as set forth above.

Takebuchi and the claims differ in that Takebuchi does not teach heat treating the sintered magnet in an oxygen containing atmosphere.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because one of ordinary skill would have been motivated to apply Imaizumi's heat treatment to Takebuchi's sintered magnet in an oxygen-containing atmosphere so as to improve the corrosion resistance of the finished magnet.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



John P. Sheehan
Primary Examiner
Art Unit 1742

jps
July 1, 2002